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FROST BROWN TODD, LLC			PICO, ERIC E	
2200 PNC CENTER			ART UNIT	
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CINCINNATI, OH 45202			3654	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/686,695

Applicant(s)

SMITH, RORY

Examiner

Eric Pico

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 12-29 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12-16 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suchodolski et al. U.S. Patent No. 5325937 in view of Matarin et al. U.S. Patent No. 5604331.

3. **Regarding claim 12**, Suchodolski et al. discloses an elevator car suspension system for attenuating elevator system vibrations. A plurality of upper tension members 16 for suspending an elevator car 20 from an upper portion of an elevator sling 12 (according to Column 2, Line 13).

4. Suchodolski et al. is silent concerning the upper tension members 16 being comprised of synthetic fibers.

5. Matarin et al. teaches tension members comprised of synthetic fibers (Column 2, Lines 34-40).

6. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members disclosed by Suchodolski et al. using synthetic fibers taught by Matarin et al. to facilitate weight reduction and tension strength within the elevator system.

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7. **Regarding claim 13**, Suchodolski et al. is silent concerning the upper tension members 16 containing aramid fibers.

8. Matarin et al. further teaches tension members containing aramid fibers (Column 2, Lines 34-40).

9. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members disclosed by Suchodolski et al. using aramid fibers taught by Matarin et al. to increase the lifespan of the tension members and facilitate tension strength within the elevator system.

10. **Regarding claim 14**, Suchodolski et al. is silent concerning the upper tension members 16 being fire resistant.

11. Matarin et al. further teaches tension members being fire resistant (Column 2, Lines 34-40).

12. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tension members disclosed by Suchodolski et al. with fire resistant properties taught by Matarin et al. to prevent damage to the tension members at high temperature.

13. **Regarding claim 15**, Suchodolski et al. is silent concerning the upper tension members 16 having vibrational frequencies less than the frequencies of the elevator system vibrations.

14. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members disclosed by Suchodolski et al. with vibrational frequencies less than the frequencies of the elevator system vibrations to

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provide means of vibrational dampening. Any means of dampening with vibrational frequencies more than the frequencies of the elevator system vibrations would not achieve vibrational dampening and cause damage to the elevator system.

15. **Regarding claim 16**, Suchodolski et al. is silent concerning the upper tension members 16 having a density less than 2.5 g/cc.

16. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members disclosed by Suchodolski et al. with a density less than 2.5 g/cc since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. In re Aller, 105 USPQ 233.

17. **Regarding claim 23**, Suchodolski et al. further discloses a method for isolating an elevator car 20 from elevator system vibrations comprised of suspending the car 20 from an elevator sling 12 with upper tension members 16.

18. Suchodolski et al. is silent concerning the upper members 16 containing synthetic fibers.

19. Matarin et al. further teaches tension members comprised of synthetic fibers (Column 2, Lines 34-40).

20. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members disclosed by Suchodolski et al. using synthetic fibers taught by Matarin et al. to facilitate weight reduction and tension strength within the elevator system.

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21. **Regarding claim 24**, Suchodolski et al. discloses the suspending step comprises suspending the elevator car 20 from the elevator sling 12 with the upper tension members 16.

22. Suchodolski et al. is silent concerning the upper tension members 16 having vibrational frequencies less than the frequencies of the elevator system vibrations.

23. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members disclosed by Suchodolski et al. with vibrational frequencies less than the frequencies of the elevator system vibrations to provide means of vibrational dampening. Any means of dampening with vibrational frequencies more than the frequencies of the elevator system vibrations would not achieve vibrational dampening and cause damage to the elevator system.

24. **Regarding claim 25**, Suchodolski et al. discloses the suspending step comprises suspending the elevator car 20 from the elevator sling 12 with the upper tension members 16.

25. Suchodolski et al. is silent concerning upper tension members 16 having an in-use natural vibration frequency of 8 Hz. or less.

26. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members disclosed by Suchodolski et al. with an in-use natural vibration frequency of 8 Hz. or less since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. In re Aller, 105 USPQ 233.

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27. **Regarding claim 26**, Suchodolski et al. discloses the suspending step comprises suspending the elevator car 20 from the elevator sling 12 with the upper tension members 16.

28. Suchodolski et al. is silent concerning upper tension members 16 having a density of about 0.138 kg/m.

29. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members disclosed by Suchodolski et al. with a density of about 0.138 kg/m since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

30. Claims 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suchodolski et al. U.S. Patent No. 5325937 in view of Matarin et al. U.S. Patent No. 5604331 as applied to claims 12-16 above, and further in view of Toyoshima et al. JP Patent No. 54040451.

31. **Regarding claim 17**, Suchodolski et al. discloses a method for isolating an elevator car platform 36 from elevator system vibrations comprised of suspending an elevator car 20 from an upper portion of an elevator sling 12 with tension members 16.

32. Suchodolski et al. in view of Matarin et al. teaches tension members manufactured from synthetic fibers (Column 2, Lines 34-40).

33. Suchodolski et al. in view of Matarin et al. is silent concerning securing the elevator car platform to a lower portion of the elevator sling with tension members.

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34. Toyoshima et al. teaches securing an elevator car platform 7 to a lower portion of an elevator sling 6 with tension members 9.

35. It would have been obvious to one of ordinary skill in the art at the time of the invention to secure the elevator car platform disclosed by Suchodolski et al. in view of Matarin et al. to a lower portion of the elevator sling with tension members taught by Toyoshima et al. to facilitate stability of the elevator car platform.

36. **Regarding claim 18**, Suchodolski et al. discloses the suspending step comprises suspending the elevator car 20 from the upper portion of the elevator sling 12 with the upper tension members 16.

37. Suchodolski et al. in view of Matarin et al. teaches tension members manufactured from synthetic fibers (Column 2, Lines 34-40).

38. Suchodolski et al. in view of Matarin et al. and further in view of Toyoshima et al. is silent concerning the upper tension members having vibrational frequencies less than the frequencies of the elevator system vibrations.

39. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members disclosed by both Suchodolski et al with vibrational frequencies less than the frequencies of the elevator system vibrations to provide means of vibrational dampening. Any means of dampening with vibrational frequencies more than the frequencies of the elevator system vibrations would not achieve vibrational dampening and cause damage to the elevator system.



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40. **Regarding claim 19**, Suchodolski et al. in view of Matarin et al. and further in view of Toyoshima et al. discloses securing step comprises securing the elevator car platform 7 to the lower portion of the elevator sling 6 with lower tension members 9.

41. Suchodolski et al. in view of Matarin et al. and further in view of Toyoshima et al. is silent concerning lower tension members having a density of about 0.138 kg/m.

42. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members taught by Toyoshima et al. with a density of about 0.138 kg/m since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

43. **Regarding claim 20**, Suchodolski et al. in view of Matarin et al. and further in view of Toyoshima et al. is silent concerning the suspending step and the securing step are accomplished with the upper and lower tension members having an in-use natural vibration frequency of 8 Hz. or less.

44. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members disclosed by both Suchodolski et al. and Toyoshima et al. with an in-use natural vibration frequency of 8 Hz. or less since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. In re Aller, 105 USPQ 233.

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45. **Regarding claim 21**, Suchodolski et al. in view of Matarin et al. and further in view of Toyoshima et al. teaches the suspending step and the securing step are accomplished with the tension members containing aramid fibers.

46. It would have been obvious to one of ordinary skill in the art at the time of the invention to further construct the tension members taught by Toyoshima et al. using aramid fibers taught by Suchodolski et al. in view of Matarin et al. to increase the lifespan of the tension members and facilitate tension strength within the elevator system.

47. **Regarding claim 22**, Suchodolski et al. in view of Matarin et al. and further in view of Toyoshima et al. teaches the suspending step and the securing step are accomplished with teaches tension members containing a fire-resistant sheath.

48. It would have been obvious to one of ordinary skill in the art at the time of the invention to further construct the tension members taught by Toyoshima et al. using a fire-resistant sheath taught by Suchodolski et al. in view of Matarin et al. to prevent damage to the tension members at high temperature.

49. Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suchodolski et al. U.S. Patent No. 5325937 in view of Matarin et al. U.S. Patent No. 5604331 as applied to claims 12-16 and 23-26 above, and further in view of Hymans U.S. Patent No. 2246732.

50. **Regarding claim 27**, Suchodolski et al. discloses an elevator car assembly for attenuating elevator system vibrations in an elevator system. The elevator system car assembly comprised of an elevator car sling for traveling in an elevator shaft and for

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supporting an elevator car platform. The car sling having an upper and a lower portion.

Suchodolski et al. in view of Matarin et al. teaches synthetic fiber upper tension members for suspending the car platform from the upper portion of the elevator car sling.

51. Suchodolski et al. in view of Matarin et al. is silent concerning isolation pads for supporting the elevator car platform.

52. Hymans teaches isolation pads for supporting on the lower portion of the elevator sling, wherein the elevator car platform is suspended horizontally from the upper portion of the elevator sling by upper tension members and supported on the lower portion of the elevator sling of the elevator sling by the isolation pads.

53. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the elevator car disclosed by Suchodolski et al. in view of Matarin et al. with isolation pads taught by Hymans to facilitate dampening of vibration in an elevator system.

54. **Regarding claim 28**, Suchodolski et al. in view of Matarin et al. is silent concerning isolation pads comprised of rubber.

55. Hymans teaches isolation pads 30 comprised of rubber.

56. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the elevator car disclosed by Suchodolski et al. in view of Matarin et al. with isolation pads comprised of rubber taught by Hymans to facilitate dampening of vibration in an elevator system.

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57. **Regarding claim 29**, Suchodolski et al. in view of Matarin et al. teaches upper tension members comprised of aramid fibers.

### ***Response to Arguments***

58. Applicant's arguments filed 03/27/2006 have been fully considered but they are not persuasive.

59. Applicant argues that there is nothing in the prior art to suggest combining the teachings of Suchodolski et al. U.S. Patent No. 5325937 in view of Matarin et al. U.S. Patent No. 5604331. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. In the case of the present application, the motivation to combine the references comes from the fact that it would have been obvious to one of ordinary skill in the art at the time of the invention to construct the tension members disclosed by Suchodolski et al. using synthetic fibers taught by Matarin et al. to facilitate weight reduction and tension strength within the elevator system as well as provide thermal protection.

60. Applicant argues that there is nothing in the prior art to suggest combining the teachings of Suchodolski et al. U.S. Patent No. 5325937 in view of Matarin et al. U.S.

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Patent No. 5604331 and further in view of Toyoshima et al. JP Patent No. 54040451.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. In the case of the present application, the motivation to combine the references comes from that fact that it would have been obvious to one of ordinary skill in the art at the time of the invention to secure the elevator car platform disclosed by Suchodolski et al. in view of Matarin et al. to a lower portion of the elevator sling with tension members taught by Toyoshima et al. to facilitate stability of the elevator car platform. Furthermore, Toyoshima et al. is only relied upon for the teachings of securing an elevator car platform to a lower portion of an elevator sling with tension members

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Pico whose telephone number is (571)272-5589. The examiner can normally be reached on 6:30AM - 3:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571)272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EEP

  
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